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# SCIENCE

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FOR THE ADVANCEMENT OF SCIENCE.

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## SOME PHILOLOGICAL ASPECTS OF ANTHROPOLOGICAL RESEARCH.<sup>1</sup>

IT is, perhaps, partly due to accident that American anthropologists meet to-day, for the first time, jointly with the American Philological Association and with the Archeological Institute of America. Nevertheless, I welcome our joint meeting as a significant fact, because it emphasizes the growing feeling of anthropologists that our science may profit from the methods developed by classical and oriental archeology, and by the well-established methods of philological and linguistic research. We hope that it may also express the growing feeling among philologists and archeologists of the importance of anthropological research for their own studies.

Our cooperation with your societies indicates a radical change in the attitude of students of anthropology. Up to the present time we have affiliated with societies representing the natural sciences and psychology. This is due to the development of modern anthropology under the stimulus of the theory of evolution, and to the important incentives that it has taken from the methods pursued by the natural sciences. It has been the endeavor of anthropologists to discover universal laws, like the laws of physics and of chemistry. This tendency has been somewhat modified by the influence of those historical methods in the biological sciences which endeavor to

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<sup>1</sup> Paper read at the joint meeting of the Anthropological Association, the Archeological Institute, and the Philological Association, at Ithaca, N. Y., December 28, 1905.

explain the present types as the result of a long-continued development from previous forms.

Owing to the peculiar conditions under which it has grown up, American anthropology has been devoted almost exclusively to the study of North American problems.

As we have penetrated more deeply into these problems we have observed that the general laws for which we have been searching prove elusive, that the forms of primitive culture are infinitely more complex than had been supposed, that a clear understanding of the individual problem can not be reached without taking into consideration its historical and geographical relations.

As this new point of view becomes more and more clearly established, the tendency must increasingly develop of turning away from the comparative methods of the natural sciences, and taking up more and more systematically the methods of history. While the first problem that presented itself to the anthropologist was the puzzling sameness of traits of culture in remote parts of the world, and while his endeavor was directed towards the discovery of the psychological causes that bring about such sameness, we begin to be inclined to view each cultural trait not primarily in comparison with parallel traits found in remote regions, but rather in connection with the direction taken by the whole culture of a tribe or a people. We begin to see that sameness of cultural traits does not always prove genetic relation, but that diverse traits have often tended to converge, so as to develop similar thoughts and activities; while, on the other hand, other traits have tended to diverge, and to assume in different regions different forms.

With the appreciation of this fact, the necessity of a much more thorough and detailed knowledge of primitive culture is recognized. While hitherto we have been

satisfied with disconnected fragments of observations on the customs of the various tribes, we begin to see more and more clearly that the student must have a full grasp of all the forms of culture of the people he studies, before he can safely generalize.

It would seem to me that the classical archeologist or the classical philologist must always have an indulgent smile when he hears of serious anthropological studies carried on by investigators, who have neither the time, the inclination, nor the training to familiarize themselves with the language of the people whom they study. According to the canons of philosophical research, would not the investigator who is not able to read the classics be barred from the number of serious students? Would not the historian who investigates the history of the civilization of the middle ages, and who can not read the literature of that period, be excluded from the number of investigators? Would not the student of Oriental countries, who has to rely for his information on the assistance of interpreters, be considered an unsafe guide in the study of these countries? Still, this is the position which has confronted anthropology up to the present time. There are very few students who have taken the time and who have considered it necessary to familiarize themselves sufficiently with native languages to understand directly what the people whom they study speak about, what they think and what they do. There are fewer still who have deemed it worth while to record the customs and beliefs and the traditions of the people in their own words, thus giving us the objective material which will stand the scrutiny of painstaking investigation. I think it is obvious that in this respect anthropologists have everything to learn from you; that until we acquire the habit of demanding such authenticity of

our reports as can be guaranteed only by philological accuracy of the record, can we hope to accumulate material that will be a safe guide to future studies.

The time must come when we must demand that collections of traditions obtained by means of the garbled English of interpreters, descriptions of customs not supported by native evidence, records of industries based only on the objective observation of the student, must be considered inadequate, and that we must demand from the serious student the same degree of philological accuracy which has become the standard in your sciences.

It is true that in many cases this ideal can not be obtained. The general breakdown of native culture, the fewness of numbers of certain tribes, the necessity of rapidly accumulating vanishing material, may sometimes compel the student, much against his will, to adopt methods of collecting which he recognizes as inadequate. Nevertheless, an important step forward will be made if we acknowledge that such collections are makeshifts that should be supplemented as soon as feasible, and wherever feasible, by more painstaking records.

Taking this standard as a guide, we must acknowledge that very little, if any, of our literature is sufficiently authentic. Perhaps the most valuable material that has been collected from this point of view is the long series of texts obtained from the Ponka and Omaha by the late James Owen Dorsey. It is true that they embrace only a limited aspect of the life of the tribe, but so far as they go, they give us a deep insight into the mode of thought of the Indian. In the whole range of American anthropological literature there is hardly anything that may be compared to this publication. We have short series of texts from a few tribes which are highly welcome, but as they stand; they are but frag-

ments of what is required. The tribes thus treated are the Sioux, the Klamath of Oregon, the Kwakiutl, the Chinook and the Haida, and there is also a considerable amount of material available from the Eskimo, although most of the published material in that language is overlaid with Danish culture.

If we consider the whole range of native life that should be treated in the same manner, we see how utterly inadequate the available collections are. To take, as an instance, the best—that of Mr. Dorsey—the contents of the volume are a collection of myths, records of war-expeditions and a long series of personal letters. These topics cover only a narrow range of the life of the Ponka. The whole material culture, their knowledge of the country and of neighboring tribes, their rituals and ritualistic myths, their social organization, their beliefs have not been recorded, and are known to us only by brief notes collected by the author.

If we acknowledge the correctness of the requirements here outlined, the work that is before us is stupendous. Let me remind you that in North America we have probably about fifty-five distinct linguistic stocks and at least three hundred and fifty distinct dialects. If full information on all of these is to be gathered, the most intensive work of a great number of students is immediately required, because the information is rapidly disappearing, and probably almost all of it will be lost inside of fifty years. The demand for thoroughness of method of collection must, therefore, be brought forward with great emphasis.

I have spoken here of the linguistic and historical method only as an adjunct of ethnological research. It is, however, true that the linguistic problem itself is one of intense interest, and one which will gain by a knowledge of the methods applied by

Indo-European philology. The forms of the Indian languages differ enormously. It is often assumed that there is one type of American language, but even a superficial knowledge of representative dialects of American stocks shows that much greater than their similarities are their differences, and that the psychological basis of morphology is not by any means the same in the fifty-five stocks that occur on our continent. The scientific problems which are involved in their study have hardly been touched. I must say with regret that the anthropologist of the present day is not the man to solve these problems; that we require not only the stimulating example of philologists, but also their assistance. *You* must give preliminary training to the men who are to take up the problems of American languages; because the centuries of experience and of labor that have been bestowed upon the development of philological methods have given you the advantage of settled lines of approach of linguistic problems. If you are willing to lend us your assistance in this important investigation, I foresee a field of important discoveries which will in their turn be of great benefit to the science of language. The psychological foundation and morphological development of American languages are so peculiar that their study must be a revelation to the student of Indo-European or of Semitic languages. Well-known problems which you have discussed for years appear in new aspects, and broad points of view for discussion of linguistic questions present themselves readily to the student who takes up the types of language peculiar to our continent.

I beg to be allowed to make the direct appeal to you here, asking you to turn the attention of your younger students to this promising field. It is virgin soil, and he who takes up the subject with a fairly adequate equipment is sure to find most ample

compensation for his toil in new and valuable discoveries. Without your help we shall never be able to solve this task, which requires the speediest attention and the cooperation of many investigators.

When we once have the equipment such as I have tried to outline, when we have investigators who collect the material in authentic form, and when we have students who will apply themselves to a painstaking analysis of the collected data, our problems will probably appear in entirely new light. The connection between prehistoric archeology and modern ethnology will necessarily become of the same character as the relation between early classical archeology and the study of classical literature. It is true our problems will always remain more obscure and more difficult than yours, because we have no historical documents that carry us back through any considerable length of time, while, by the necessities of the case, we are compelled to use, instead of historical methods, geographical methods. We have to trace historical transmission and historical contact by studies of geographical distribution. Often we find ourselves confronted by contradictory evidence, but, notwithstanding all these difficulties, the little progress that has been made during the last twenty years indicates plainly that, from this point of view, the historical problem of anthropology may be approached with the hope of a certain amount of success and that we may be able to reconstruct important historical facts.

I have given expression here to the growing need of the introduction of sounder philological methods of collection and of historical methods in the treatment of anthropological problems. I do not wish to be understood as advocating a dissociation of anthropology from psychology and the natural sciences. The source from which modern anthropology has grown up, the problems that have presented themselves to

us from the point of view of the student of natural sciences, who takes human nature for his subject, are novel and are important. They touch upon the fundamental questions underlying the history of human civilization, and their clear formulation must be recognized as a distinct contribution of anthropology to the scientific development of the day. Most important among these results is, perhaps, the recognition of the fundamental sameness of the traits in human culture the world over and of the psychic unity of mankind. The data on which these conclusions are based have not been without influence upon modern history and modern philology, and I do believe that if we have to learn much from you, we can also offer in return a point of view that will prove fertile in your work. The modification of the theories of the development of mythology, the better appreciation of the earliest development of Greek and Oriental culture, would hardly have come about if anthropological points of view had not made themselves felt in the minds of archeologists and philologists. If it must be *our* endeavor to broaden our methods by learning from *you* the foundations of historical research, we may offer to you also the results of many honest attempts of applying the methods of natural science to the phenomena of human culture.

Let us hope that our first joint meeting may introduce a period of closer contact, of greater readiness on the part of anthropology to learn from her older sisters, and of a better understanding of the aims of anthropology by students of language and of history.

FRANZ BOAS.

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*THE CONDITIONS OF ADMISSION TO COLLEGE.<sup>1</sup>*

THE topic assigned me springs out of a paper given at the July meeting of the

National Educational Association upon another topic assigned me: 'Which is better, the western plan of admitting students to colleges and universities by certificates from duly inspected secondary schools, or by the eastern method of admitting only by examinations conducted by representative boards or otherwise?' An abstract of my treatment of this subject may best serve as an introduction to the topic of to-day:

Within a few years it may be determined which plan, with all it implies in shaping far-reaching educational ideals and practises, shall be national. The term 'western' and 'eastern' must not import provincial pride, or sound a note of sectionalism.

The examination by the separate college of the individual candidate, giving 'personal contact,' has failed on account of the increase in numbers.

The college entrance examination board organized in 1900, examined some 2,100 candidates this year—a Lilliputian effort as compared with the need to examine some 66,000 candidates. It has all the disadvantages of massed examinations, making it a gamble for the entering student and of judgment simply upon paper.

The New England college certificate board cares for some 2,000 candidates and has the virtue of resting upon the judgment of the teacher acquainted with the pupil. But it lacks any note of nationality and is without provision for any proper inspection and accrediting of the schools.

President Hadley has just announced that for the present Yale will adhere to the separate examination system. Yet President Hadley personally would give teachers of proved ability the opportunity to recommend for provisional admission to the freshman class. Thus President Hadley is not far from the kingdom of the outright accrediting system for which we hope he may become a leader, not only amongst his brethren of the eleven colleges in the New England college entrance certificate board, but throughout the nation. The whole thing might be done if

spection) systems for admission to college looking toward a common or national administration in the interests of students, colleges and the preservation of the standards? Discussion opened by President George E. MacLean, of the State University of Iowa, at the meeting of the National Association of State Universities, Washington, D. C., November 13–14, 1905.

<sup>1</sup> Can there be a coordination of the examining, certifying, and accrediting (including school in-